

IN THE CLAIMS:

Please amend Claims 1, 4 and 6 as follows:

1. (Currently Amended) An X-ray imaging method comprising the steps of:
forming a set of 2-dimensional X-ray images of an object to be examined,
for example the coronary vascular system of a patient, by means of a scan rotation of an
X-ray source around said object over a run length, said X-ray images being acquired at
predetermined characteristic time moments in a cardiac cycle of the object; and
reconstructing a 3-dimensional volume of the imaged object, wherein the run
length of the scan rotation over substantially 180° is ~~at least 15 s and preferably about 20~~
s approximately 10° per second, and wherein the number of measuring points obtained in
successive cardiac cycles for reconstructing the 3-dimensional volume is reduced.
2. (Previously Amended) An X-ray imaging method according to claim 1,
wherein, before the reconstructing step, images obtained at predetermined corresponding
characteristic time moments in successive cardiac cycles are correlated with each other.
3. (Previously Amended) An X-ray imaging method according to claim 2,
wherein the characteristic time moments substantially correspond to R-peaks of the
cardiac cycle.
4. (Currently Amended) An X-ray imaging method according to claim 1,
wherein, before the reconstructing step, images obtained at predetermined neighbouring

neighboring time moments in a predetermined characteristic time interval of a cardiac cycle are correlated with each other.

5. Cancelled

6. (Currently Amended) 3D-rotational X-ray apparatus for applying the method according to claim 1, comprising a circular C-arm with a drive, the C-arm accommodating an X-ray source and an X-ray image pick-up device and being rotatable over an angle of substantially 180° around its center by means of said drive, triggering means for triggering the X-ray images at predetermined characteristic time moments in a cardiac cycle of the object, wherein the number of measuring points obtained in successive cardiac cycles is reduced, and means for processing the images obtained to reconstruct a 3-dimensional volume of the object, wherein the drive of the C-arm is adjusted to a run length of a scan rotation over substantially 180° ~~which is at least 15 s~~ and preferably about 20 s at approximately 10° per second.